

# Navy Awards SAIC Contract for C5ISR

MCLEAN, Va. – The U.S. Navy has awarded Science Applications International Corp. (SAIC) an indefinite-delivery, indefinite-quantity contract for the production and delivery of integrated command, control, communications, computers, computers, intelligence, surveillance and reconnaissance (C5ISR) systems, networks and support equipment in support of the Space and Naval Warfare Systems Center (SSC) Atlantic, the company said in a Nov. 8 release. The single-award contract has a five-year period of performance worth approximately \$597 million.

The contract has an additional two-year award term that, if earned, would increase its potential value to approximately \$861 million. Delivery/task orders awarded under the contract will include procuring, fabricating, assembling, integrating, testing, inspecting and delivering a highly diverse range of systems that include various complex designs provided by Navy program offices in the form of technical data packages.

Systems vary in complexity, but generally include the integration of engineered cable assemblies, mounting kit assemblies, hardware, and software/security applications necessary to provide the warfighter with the capability to communicate, maintain situational awareness and achieve information dominance. Work will be performed in Charleston, South Carolina, and Norfolk, Virginia.

“We are proud to continue to help SSC Atlantic streamline their system production services and provide warfighters with the latest technology available,” said Jim Scanlon, SAIC senior vice president and general manager of the Defense Systems Customer Group. “For this contract, SAIC enables shared resources across the command, resulting in cost

savings; as we provide complex electronic systems to the Navy.”

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## **HM-15, Lewis B. Puller Team Up for Training**

MANAMA, Bahrain – An MH-53E Sea Dragon assigned to the “Blackhawks” of Helicopter Mine Countermeasures Squadron (HM) 15 embarked the expeditionary sea base ship USS Lewis B. Puller (ESB 3) for the first time in the U.S. 5th Fleet area of operations for interoperability training Oct. 28-Nov. 7.

The training focused on improving airborne mine countermeasures (MCM) capability and interoperability in the U.S. Central Command area of responsibility (AOR). Lewis B. Puller is capable of supporting a wide variety of missions including crisis response, counter-piracy operations, maritime security operations and humanitarian aid/disaster relief. By embarking HM 15, the will add the airborne MCM mission to its expanding repertoire.

U.S. 5th Fleet’s Task Force 52 deputy commander, Capt. Andy Lamb of the U.K. Royal Navy, visited the Puller to observe the training.

“Ensuring maritime access for the free flow of trade is what mine countermeasures is about,” said Lamb. “The integration of HM-15 with Puller is a key component of this and demonstrates first-class versatility and readiness.”

The airborne aspect of MCM is one of the three areas that support the MCM triad. In addition to shipboard and expeditionary MCM, airborne MCM helps ensure stability and

security in the region's three critical chokepoints. Reoccurring training opportunities ensure that Task Force 52 is prepared to handle any potential threats to the free flow of commerce.

The expeditionary sea-base platform supports Naval Amphibious Force, Task Force 51, 5th Marine Expeditionary Brigade's (TF 51/5's) diverse missions that include crisis response, airborne MCM, counter-piracy operations, maritime security operations and humanitarian aid/disaster relief missions while enabling TF 51/5 to extend its expeditionary presence in the world's most volatile regions.

"Lewis B. Puller provides TF 51/5 and 5th Fleet a permanent platform that can be rapidly reconfigured to support vastly different mission sets in mere days," said Capt. Scott Hattaway, the ship's commanding officer. "Embarking the Blackhawks of HM-15 to conduct airborne MCM operations demonstrates this flexibility, especially in light of the entire equipment on load to achieve full mission-capability and actively conducting AMCM operations was accomplished in less than three days pierside."

Lewis B. Puller was commissioned as a warship after previously being classified as a "USNS" ship in August 2017. Redesignating the ship as a commissioned warship allows the Navy greater operational flexibility and provide critical support to TF 51/5's joint forces at sea, from the sea and ashore to meet potential threats in the 5th Fleet area of operations.

U.S. 5th Fleet area of operations encompasses about 2.5 million square miles of water area and includes the Arabian Gulf, Gulf of Oman, Red Sea and parts of the Indian Ocean. The expanse is comprised of 20 countries and includes three critical choke points at the Strait of Hormuz, the Suez Canal and the Strait of Bab al Mandeb at the southern tip of Yemen.

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# First California-based Fast Response Cutter Commissioned in San Pedro

SAN PEDRO, Calif. – The Coast Guard commissioned the first California-based 154-foot fast response cutter (FRC) in San Pedro Nov. 8, the 11th Coast Guard District said in a release.

Forrest Rednour is the first of four Sentinel-class FRC to be homeported at Base Los Angeles-Long Beach. Three additional FRCs are scheduled to be commissioned by next summer. While these ships will be based in San Pedro, they will operate throughout the 11th District, which includes all of California and international waters off Mexico and Central America.

“This cutter is specifically designed to face today’s threats in the maritime domain,” said. Rear Adm. Peter Gautier, the 11th District commander. “This cutter is faster, goes further and can do more than any other Coast Guard patrol boat.”

FRC’s are 154-foot multimission ships designed to conduct drug and migrant interdictions; ports, waterways and coastal security operations; fisheries and environmental protection patrols; national defense missions; and search and rescue.

“This crew and I are truly honored and humbled to be assigned to serve as plank owners aboard this cutter named for a true Coast Guard hero,” said Lt. Graham Sherman, Forrest Rednour’s commanding officer.

To date, the Coast Guard has accepted delivery of 31 FRCs. Each ship is designed for a crew of 24, has a range of 2,500 miles and is equipped for patrols up to five days. The FRCs

are part of the Coast Guard's overall fleet modernization initiative.

FRCs feature advanced command, control, communications, computers, intelligence, surveillance and reconnaissance equipment, as well as over-the-horizon response boat deployment capability and improved habitability for the crew. The ships can reach speeds of 28 knots and are equipped to coordinate operations with partner agencies and long-range Coast Guard assets such as the national security cutters.

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## **Construction Begins on Future USS Patrick Gallagher**

BATH, Maine – The construction of the future USS Patrick Gallagher (DDG 127) is officially underway at General Dynamics Bath Iron Works (BIW) shipyard, Naval Sea Systems Command said in a Nov. 9 release.

The milestone was marked with a ceremony held in the shipyard's fabrication shop during which U.S. Sen. Susan Collins, R-Maine, made the initial cut to the first plate of steel for the ship. The ceremony was attended by BIW shipyard workers and Navy representatives.

The ship will honor Lance Cpl. Patrick Gallagher, Marine Corps Vietnam veteran and Navy Cross recipient. Gallagher was awarded the Navy Cross for his actions on July 18, 1966, when he selflessly threw his body on an incoming grenade, shielding his fellow Marines. He quickly pitched the grenade to a nearby river where it safely exploded out of harm's way, without injury to himself or others. Gallagher was killed in action one year later in DaLoc near Da Nang on March 30, 1967. He is

one of only 30 known Irish citizens to have died in the Vietnam conflict.

“It is exciting to commence construction on what will be the 77th ship of the Arleigh Burke class” said Capt. Casey Moton, DDG 51-class program manager, Program Executive Office Ships. “Not only will this ship continue the legacy of enduring warfighting capability, it will carry with it the strength and courage demonstrated by its namesake.”

DDG 127 will be the last Flight IIA configuration destroyer built by BIW. The ship will incorporate the AEGIS Baseline 9 Combat System which includes Integrated Air and Missile Defense capability. This system delivers quick reaction time, high firepower, and increased electronic countermeasures capability for anti-air Warfare.

BIW is currently in production on the future Arleigh Burke-class destroyers Daniel Inouye (DDG 118), Carl M. Levin (DDG 120), John Basilone (DDG 122) and Harvey C. Barnum Jr. (DDG 124), as well as the Zumwalt-class destroyer Lyndon B. Johnson (DDG 1002). BIW was also recently awarded a contract for the construction of four DDG 51 Flight III ships as part of the Navy’s fiscal 2018-22 multiyear procurement.

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## **Navy Submarine Force Boss: All Submarines to Get 3D Printers**

ARLINGTON, Va. – The Navy is moving to equip all of its submarines with additive manufacturing capability, also known as 3D printing, as part of an initiative to increase at-sea

repair capability for the submarine force.

“[We’re] actively experimenting with additive manufacturing and working expediently to provide this capability to all my ships,” Vice Adm. Chas Richard, commander, Submarine Forces, said Nov. 7 at the Naval Submarine League’s symposium. “All my boats will get 3D printers in the near term.”

Richard said that the crew of the attack submarine USS Virginia “went and got their own 3D printer and, using that, built themselves apart at sea to help keep their boat on deployment. It is that type of problem-solving that happens daily across the force.”

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## **Future USS Michael Monsoor Departs Bath Shipyard for San Diego**

BATH, Maine – The future USS Michael Monsoor (DDG 1001), the second ship in the Zumwalt-class of destroyers, departed General Dynamics’ Bath Iron Works (BIW) shipyard Nov. 9, Naval Sea Systems Command said in a release.

The guided missile destroyer is en route to California where it is so scheduled to be commissioned in Coronado on Jan. 26, prior to commencing post-delivery availability and combat systems activation.

As the ship’s departure coincides with Veterans Day weekend, the ship’s crew will take time to reflect on the sacrifice of service members, such as Petty Officer 2nd Class Michael A. Monsoor. DDG 1001 was named in honor of Monsoor, a U.S. Navy

SEAL, who was posthumously awarded the Medal of Honor for his heroic actions while serving in Ramadi, Iraq.

As noted in the Medal of Honor citation, “by his undaunted courage, fighting spirit, and unwavering devotion to duty in the face of certain death, Petty Officer Monsoor selflessly gave his life for his country, thereby reflecting great credit upon himself and upholding the highest traditions of the United States Naval Service.”

“Michael Monsoor was, in the words of his teammates, a big, tough frogman,” said Capt. Scott M. Smith, commanding officer of PCU Michael Monsoor. “DDG 1001 is also big and tough – made that way by the skilled and dedicated workers and operators of Bath Iron Works. We are proud of our ship and our association with the City of Ships.”

Zumwalt-class destroyers feature a state-of-the-art electric propulsion system, wave-piercing tumblehome hull, stealth design and are equipped with space and weight margins that will allow the ship to employ our most advanced warfighting technology. These ships will be capable of performing a range of deterrence, power projection, sea control, and command and control missions while allowing the Navy to evolve with new systems and missions.

“This formidable warship will be a lasting tribute to the ship’s namesake. Petty Officer Monsoor’s bravery and sacrifice will be reflected in the crew’s dedication for generations to come,” said Capt. Kevin Smith, DDG 1000 class program manager, Program Executive Office Ships. “With the ship underway, we look forward to celebrating the ship’s commissioning with the Monsoor family and ship’s crew in the coming months.”

The Navy accepted hull, mechanical and electrical (HM&E) delivery of DDG 1001 from shipbuilder BIW on April 24. Zumwalt-class ships are delivered through a two-phase approach in which combat systems are installed and activated subsequent

to HM&E delivery. Following commissioning, Michael Monsoor will begin combat systems activation, testing and trials.

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## **Navy: Torpedo Tube-Launched Version of Razorback UUV Planned**

ARLINGTON, Va. – The Navy is on track to deliver an operational unmanned underwater vehicle (UUV) for routine submarine deployment but also plans to develop the capability to launch it from a submarine's torpedo tubes.

The Razorback is a submarine-launched version of the Hydroid-built Littoral Battlespace Sensing Autonomous Underwater Vehicle, a version of the REMUS 600 UUV that entered full-rate production for the Navy in 2013. Details of the Razorback's payloads and capabilities are classified, but it is planned for launch and recovery from a Dry Deck Shelter, a compartment that can be carried on top of the hull of certain submarines.

“We're currently fielding those vehicles for integration with the Dry Deck Shelter and we have plans to develop a torpedo tube-launched version of that in the near future,” said Capt. Peter Small, the Navy's program manager for UUVs and unmanned surface vehicles, Nov. 7 at the Naval Submarine League's symposium.

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# Expeditionary Warfare Director: 'We're Going to Do Sea Control in Different Ways'

WASHINGTON – The Marine general in charge of the Navy's expeditionary warfare programs said his mission was not just "reinvigorating expeditionary warfare," but to get Marines "back to naval warfighting" after two decades of primarily land combat.

Maj. Gen. David Coffman sketched out a plan to institute a program to strengthen and modernize mine warfare, which he called "an historically under-resourced and neglected capability," then focusing on increasing the size and lethality of the amphibious fleet to enable the naval expeditionary forces "to go anywhere, anytime, and take what we need with us."

Addressing a forum at the Hudson Institute, Coffman, director of expeditionary warfare on the Navy staff, said: "We need a next-generation expeditionary warfare that can operate across the range of military operations." That means the ability to "fight tonight, fight tomorrow," across all domains, combatant commands and the full range of military operations.

"Our goal is to reinvigorate naval expeditionary forces" to meet the "enduring need for power projection," which will require the ability to gain sea control by new means including the historic Marine mission of seizing and defending expeditionary advanced bases, he said.

He also cited efforts to arm amphibious ships and to deploy on them Marine weapons that could help the naval forces fight through adversary's defenses.

"We're going to do sea control in different ways," he said.

Coffman said he would be focusing on the mine warfare programs this year, which apparently referred to fiscal 2019, and turning next year to "the maturation of the amphibious force," addressing "what makes that part of the Navy more lethal, more capable."

He said history shows that since World War II the Navy has tended to neglect its mine warfare capabilities until it periodically "comes up and bites you," citing the frustrated amphibious landing at Wonsan during the Korean War and the two Navy ships damaged by mines during Operation Desert Storm.

Coffman said his office was working a mine warfare master plan that would seek to sustain the legacy mine countermeasure (MCM) force of Avenger-class MCM ships and MH-53E helicopters, while developing future MCM capabilities that could keep up with evolving technology.

That future force would not have single-mission MCM ships, but would use Littoral Combat Ships and other platforms to deploy unmanned air, surface and undersea vehicles to find and neutralize mines, he said. The MH-53s would be replaced by MH-60s and the MQ-8 UAVs.

Turning to the amphibious force, Coffman said, "we have a great path to 38 amphibious ships," which is the goal in the Navy's plan for a 355-ship battle fleet. That amphibious force would include 12 "big-deck" amphibious assault ships of the Wasp and America classes, the 13 San Antonio-class amphibious transport docks, and the modified version that will replace the aged dock landing ships.

"My personal belief is, we have the right hulls," he said, while conceding the path to 38 amphibs was clouded by "fiscal trade space" challenges, a reference to the Navy's shipbuilding priorities that put amphibious ships below submarines, carrier and surface warships.

Coffman also complained that inadequate command and control technology on the older amphib, particularly the big decks, prevents the embarked Marine Air-Ground Task Forces (MAGTFs) from taking full advantage of its capabilities, such as the F-35B strike fighter with its fifth-generation sensors and data processing capabilities.

“We have to embark a fifth-generation MAGTF on a fourth-generation ship,” he said.

Due to the growing threat that Russia, China and maybe Iran could use long-range defenses to keep naval expeditionary forces away from a crisis zone, Coffman said there were considerations of putting more defensive and offensive weapons on the amphib and the Marines employing their own long-range weapons from the ships or from expeditionary bases to help in the sea control fight. He did not provide any details.

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## **Navy Submarine Programs Facing Many Pressing Challenges, Deadlines**

ARLINGTON, Va. – The Navy’s submarine production enterprise is besieged by growing demands as it moves Virginia-class construction to two a year, is building payload models for future Virginias and is designing new models, and is working on refueling some of the Los Angeles-class attack boats, while focusing on the No. 1 priority – keeping the Columbia-class program on the tight schedule to replace the aging Ohio-class boomers.

On top of all that is the urgent requirement to overcome the

“debacle” of faulty welding in new ballistic-missile tubes that will impact the narrow schedule margin to meet the Columbia’s firm 2031 start of patrols, and the possibility that Virginia production could be increased to three a year in the near future.

Adding to that staggering array of challenges described by the top submarine program officials Nov. 7, the Navy program managers and the sub building industry are confronted with a need to not only expand their workforces to meet the growing demands, but to find new skilled builders and designers to replace an aging cadre of workers.

But during their presentations at the Naval Submarine League’s annual symposium, the Navy officials returned repeatedly to the crucial requirement to have the first Columbia-class ballistic-missile submarines ready for their nuclear-deterrence missions before the current Ohio-class boats hit their already extended service life.

“We’re doing everything we can to deliver Columbia on patrol, on time,” said George M. Drakeley, executive director in the submarine program executive office. “Beside keeping the Columbia program at an affordable cost, “our biggest challenge is to deliver on time.”

History shows that the first of class in any ship program does not deliver on time, Drakeley said, noting “We don’t have that luxury.”

“It’s very important we get the Columbia out by 2031 as the Ohios retire,” he said, because “we’ve extended the Ohios [service life] from 30 to 42 years.”

Navy officials have said that they cannot guarantee that the oldest of the Ohio boomers would be able to submerge for a strategic patrol after 2031.

Earlier in the day, Adm. Frank Caldwell, director of Naval

Nuclear Propulsion, showed the importance of the Columbia program by noting the ballistic-missile submarines were “the only survivable component” of the nuclear deterrent triad and would carry 70 percent of the warheads allowed by the New Start treaty with Russia.

Capt. Jonathan Rucker, program manager for Columbia, said they were “in full swing” with detailed design and advanced procurement underway and would be ready to start construction in 2021. In addition to focusing on keeping on schedule, Rucker said, “to ensure the Navy gets 355 ships ... we need to get Columbia down to an affordable program cost.”

To do that, he said, “my staff is working on how to get to ‘no,’ which means don’t change requirements.”

To get a head start on Columbia construction, the program started production of the common missile compartments, which also will be used in the Royal British Navy’s Dreadnaught ballistic missile submarines.

But last summer, inspectors discovered “this missile tube debacle,” he said, referring to a large number of substandard welds. The program office is working with industry to address the flawed welding and to impose a more stringent oversight regime, but correcting the flaws has taken 10 months from the schedule.

Capt. Christopher J. Hanson, program manager for the Virginia submarines, noted that they were now steadily producing two boats a year, were building the first of the Virginia Payload Modules, which will increase the boats’ strike capabilities, and were working on designs for improved future versions.

And Drakeley noted that “Congress has put into law” the requirement to negotiate with industry on increasing the construction rate to three a year, which might happen by 2022 or ’23.

Meanwhile, they are working on ways to refuel the nuclear reactors on five of the older Los Angeles-class attack boats to extend their service lives as part of an effort to expand the sub fleet from 48 to 60 to meet the demands from regional combatant commanders.

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## **Strategy Drives Undersea Warfare Programs**

ARLINGTON, Va. – The Navy is working on greater integration of all aspects of undersea warfare, including strategic deterrence, attack submarines, unmanned undersea vehicles, seabed infrastructure and the surface and air anti-submarine assets, to ensure its investments and tactics all will contribute to a possible fight, the director of Undersea Warfare said Nov. 8.

“We are, no kidding, having the strategy drive the programs ... to make sure we’re not buying things we don’t need to win the war,” Rear Adm. John Tammen told the Navy Submarine League’s annual symposium. The directions from the National Defense and National Security strategies are guiding an Integrated undersea investment strategy, he said.

A crucial focus of those investments is the modernization of the sea-based strategic deterrence with the Columbia ballistic-missile submarine to replace the current Ohio-class boomers.

“There really is no margin for Columbia,” to be on patrol by 2031, Tammen said, repeating a message heard earlier in the day from Vice Adm. Johnny Wolfe, director of Strategic Systems Programs. The ballistic-missile subs are “the only survivable

component" of the strategic deterrence triad and provide 70 percent of the nuclear deterrent warheads, he said.

Keeping Columbia on schedule is critical because the Navy is extending the service life of the Ohios out to 42 years and "we've never taken a submarine out to 42 years." To ensure the Ohio-class boats can remain operational for 42 years, the Navy stood up a study that will use the four early Ohios now serving as guided-missile subs as a test, he said.

They also will continue to modernize the Ohios to keep them relevant out to 42 years, Tammen said, using technology going into the new models of Virginia-class attack subs.

Tammen also discussed the little-known fact that the new Nuclear Posture Review said the sea-based strategic deterrence program would have "at least 12 Columbia" boats. It has been widely understood that the program called for only 12 of the new boomers.

Without going into any details, Tammen said "we're going to keep the Columbia [production] line hot after the 12th boat, so if we need to build more than 12, we can."

The limit on 12 Columbias is generally based on the number of nuclear warheads and delivery vehicles allowed under the New Start arms control treaty with Russia.

Tammen put considerable focus on the efforts to develop a family of unmanned undersea vehicles noting that they have consolidated unmanned underwater vehicle (UUV) programs into his N-97 office, while closely cooperating with Expeditionary Warfare (N-95), which plans to use unmanned underwater systems in its mine warfare missions.

"Every day we have conversations on how we can move faster with UUVs," he said.

In apparent response to some criticism of the slower

development of UUVs, compared the aerial or ground unmanned systems, Tammen said, "unmanned undersea vehicles are truly autonomous. There is no joystick [controller] and no lawyer standing behind the joystick." And they "have to ensure we can get the data off of them, to make them relevant."

Although the primary purpose of producing the Virginia Payload Modules was to increase the Tomahawk strike capabilities of the attack subs, Tammen said the modules also could launch smaller UUVs. And the Navy is looking at other weapons that could go into the modules as part of the increased focus on tactical warfare capabilities.

Looking ahead, Tammen said his office was working on designs for block 5, 6 and 7 Virginia-class subs, but after that "we get to a new SSN," which will "put fast back into fast attack. Fast with stealth."